ECS Configuration Change Request Page 1 of Page(s)

1. Originator	2. Log Date:	3. CCR #:	4. Rev:	5. Tel:	6. Rm #:	7. Dept.
William A. Goodman	**4/4/02**	02-0279	—	x0338	1053	RTSC

8. CCR Title: Install new microcode on STK 9840/9940 - 1.30.111 9940 / 1.30.211 in PVC

9. Originator Signature/Date	10. Class	11. Type:	12. Need Date: 04/07/02
William Goodman /s/ 4/3/02	**IN**	**CCR**	

13. Office Manager Signature/Date	14. Category of Change:	15. Priority: (If "Emergency" fill in Block 27).
Byron Kimball /s/ 4/3/02	Initial ECS Baseline Doc.	Emergency

16. Documentation/Drawings Impacted:	17. Schedule Impact:	18. CI(s) Affected:
910-TDA-003-Rev72	NONE	

19. Release Affected by this Change:	20. Date due to Customer:	21. Estimated Cost:
6A		None - Under 100K

22. Source Reference: ☐ **NCR (attach)** ☐ **Action Item** ☐ **Tech Ref.** ☐ **GSFC** ☒ **Other:**

23. Problem: (use additional Sheets if necessary)
STK 9840/9940 drives in the ECS Project have been displaying "spin-up errors" when AMASS/ACSLS attempts to put a volume in the drive. STK has stated that the most recent microcode provides code that will help to resolve this issue. The spin-up errors are particularly troublesome, becaues it causes the drives to go off-line, which in turn causes the volume to be marked "inactive". This will affect perfomance, as well as access to the archive. Provide Landover an SPS version of the code (test only) for customer testing on site new microcode for STK 9840 / 1.30.111 9940 / 1.30.211 .

24. Proposed Solution: (use additional sheets if necessary)
Install and test the new microcode for STK 9840 / 1.30.111 9940 / 1.30.211 in the PVC

25. Alternate Solution: (use additional sheets if necessary)

26. Consequences if Change(s) are not approved: (use additional sheets if necessary)

27. Justification for Emergency (If Block 15 is "Emergency"):
Fix needed by operational sites ASAP.

28. Site(s) Affected: ☐ EDF ☒ PVC ☐ VATC ☐ EDC ☐ GSFC ☐ LaRC ☐ NSIDC ☐ SMC ☐ AK ☐ JPL ☐ EOC ☐ IDG Test Cell ☐ Other

29. Board Comments:	30. Work Assigned To:	31. CCR Closed Date:

32. EDF/SCDV CCB Chair (Sign/Date):	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
33. M&O CCB Chair (Sign/Date):	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS

TDx: TD=Technical Document, x=Site Identifier, nnn=Document ID within a document series

34. ECS CCB Chair (Sign/Date):	Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS

ADDITIONAL SHEET

CCR #: 02-0279 Rev: — Originator: William A. Goodman

Telephone: x0338 **Office:** 1053D

Title of Change: Install new microcode on STK 9840/9940 drives

EDC statement:

The firmware has been running on the 9840 firmware 1.30.111 and 9940 firmware 1.30.211 drive without any problem. Brian has it loaded on both the old and new 9940 drives and it is working fine. STK told Brian Petty this code will be released shortly for install. It did resolve our problems with the newer drives.

Original diagnosis of the problem:

I owe you a status update on this problem as well as a proposed NASA
> account/s plan.
>
> Status:
> NASA EROS - all 9940A drives currently being used by the customer are at
> the lower, non-2900 "201" level ESI cards.
> 5 non-production drives remain on-site, one of those is at
> the "201" level, 4 are "203" level ESI cards.
>
> NASA Langley- all 9940A drives currently being used by the customer are at
> the lower, non-2900 "201" level ESI cards.
> zero remaining 9940A drives at the "203" level card.
>
> NSIDC- 2 9940A drives, one known to be in production at
> the "201" level, one at the "203" level, Toby is out, Bill Moorehead was
> supposed to get me a status from the site but I've not yet received word.
> (I have one "201" level spare being transferred by logistics to this
> account as of yesterday by Jim Hidy).
>
> NASA Goddard- When I last spoke with Steve Wolf, he thought he needed 4
> spares to replace the only 4 in use at the "203" level.
> I have Jim Hidy working with Ron Corl to ship 4 "201" level
> spares to Silver Springs by Friday 12/21.
>
> The above activity should address all of the NASA immediate needs, any
> further NASA drive requirements between now and January 2nd will be
> managed through Jim Hidy to ensure "201" level support.
>
> As of yesterday Engineering had experienced successful testing of the
> intended code solution. Here is a copy of an email I received late
> yesterday from the test engineer in the EVT lab.

> "I have been testing the code Dennis gave me for the 2900 sno fix for the
> 9940(a) drives. I have ran several cartridges that failed prior, and it
> seems to work OK. I have one more cartridge that I want to read, but it
> looks OK so far."
>
> Based upon this code effort, I want engineering to proceed with an urgent
> code build/release (requires at least 2 weeks more for regression testing
> in all areas). Probably will be a 1.30.211 version of code. Upon
> completion of testing, I'd like to propose we provide NASA EROS an SPS
> version of the code (test only) for customer testing on site with a
> previously failing set of data. If that is possible and successful, we'd
> then release the code GA status for all 9940A customer accounts in lieu of
> drive replacements.
>
> If we can reach this point, I'd then like to propose NASA use the new code
> on any/all remaining "203" level drives instead of drive replacements for
> production use.
>
> Obviously at any point where the code fails to be an option, we would/will
> proceed with drive replacements as necessary.
>
> Manufacturing is only shipping 9940A new build drives with "201" level
> hardware and all FLEX spare 9940A drives out of Colorado are at the "201"
> level ESI as well.
>
> Engineering is in process of releasing an Urgent EC to ensure we maintain
> all future 9940A shipments at the "201" level ESI functionality. We hope
> to release the code solution to address/manage any and all existing 9940A
> drives at the "203" level ESI both at existing customer sites as well as
> spares around the world. If within the next two weeks, we discover the
> code solution is not going to be available, I'll initiate a spares purge
> world wide to address any future customer 2900 accounts will receive the
> needed HW solution.
>
>
> Once again, the NASA site status above is my current understanding based
> upon phone conversations with Brian Petty, Steve Wolf, Nick Galotti and
> Bill Moorehead this week, if I mis-understood one of these guys, please
> let me know ASAP as I'll be out beginning tomorrow and return a week from
> today 12/27/01.